DATA SHEET

Jena Bioscience

FTase

Protein farnesyltransferase, α- and β-subunit
rat, recombinant, *E. coli*

Cat. No.	Amount
PR-102	50 µg

For general laboratory use.

Please centrifuge briefly before opening (volume ≤2 ml).

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: α: 44 kDa, β: 49 kDa

Accession number: Q04631 / Q02293

Purity: > 90 % (SDS-PAGE)

Form: liquid, supplied in 50 mM HEPES pH 7.4, 40 mM NaCl, 1 mM TCEP and 5 µM $ZnCl_2$

Description:
FTase catalyzes the transfer of the farnesyl group from farnesyl diphosphate to proteins containing a C-terminal CaaX motif, where 'C' is a conserved cysteine that is the site of farnesyl modification, 'a' is usually an aliphatic amino acid, and 'X' is methionine, serine, glutamine, or alanine.
The protein does not have any tags.

Activity:
1 pmol of FTase will transfer 1 pmol of farnesyl to H-Ras in 15 min at 37°C.

Selected References:

Lackner *et al.* (2005) Chemical genetics indentifies Rab geranylgeranyl transferase as an apoptotic target of farnesyl transferase inhibitors. *Cancer Cell.* **7**:325.

Zimmerman *et al.* (1998) High-level expression of rat farnesyl:proteintransferase in Escherichia coli as a translationally coupled heterodimer. *Protein Express. Purif.* **14**:395.

Hooff *et al.* (2008) Isoprenoid quantitation in human brain tissue: a validated HPLC‐fluorescence detection method for endogenous farnesyl- (FPP) and geranylgeranylpyrophosphate (GGPP). *Analytical and Bioanalytical Chemistry.* **392 (4)**:673-680.

Watanabe *et al.* (2008) Inhibitors of Protein Geranylgeranyltransferase I and Rab Geranylgeranyltransferase Identified from a Library of Allenoate-derived Compounds. *J. Biol. Chem.* **283 (15)**:9571-9579.

Eckert *et al.* (2009) Regulation of the brain isoprenoids farnesyl- and geranylgeranylpyrophosphate is altered in male Alzheimer patients. *Neurobiology of Disease* **35 (2)**:251-257.